

Part VII

Watershed Task Force Report

WATERSHED TASK FORCE

FACILITATOR	KATHY EHNEBUSKE 1339 AZALEA AVE MCKINLEYVILLE, CA 95521 PHONE: (707) 839-4612 FAX: (800) 448-8761	
INTEREST CATEGORY	MEMBER	ALTERNATE
POTW	STEVAN STROUD CITY OF MERCED, PUBLIC WORKS DEPARTMENT 678 W 18TH ST MERCED, CA 95340 PHONE: (209) 385-6846 FAX: (209) 725-8775	MICHAEL J. WALLIS EAST BAY MUNICIPAL UTILITY DISTRICT P.O. BOX 24055 OAKLAND, CA 94623 PHONE: (510) 287-1615 FAX: (510) 286-1530
STORM-WATER	ALEX SHEYDAYI VENTURA COUNTY STORMWATER QUALITY PROG. 800 S VICTORIA AVE VENTURA, CA 93009 PHONE: (805) 654-2040 FAX: (805) 654-2424	PHIL REICHMUTH CITY OF MONTEREY CITY HALL MONTEREY, CA 93940 PHONE: (408) 646-3920 FAX: (408) 649-3702
INDUSTRY	ROBERT KANTER PORT OF LONG BEACH 925 HARBOR PLAZA, 4TH FL LONG BEACH, CA 90802 PHONE: (310) 590-4156 FAX: (310) 495-4925	MATTHEW W. COWDEN CROSBY, MEAD, BENTON & ASSOCIATES 6345 BALBOA BLVD, STE 140 ENCINO, CA 91316 PHONE: (818) 343-5384 FAX: (818) 343-6065
AGRI-CULTURE	JACKSON R. GUALCO THE GUALCO GROUP 770 L ST, STE 1400 SACRAMENTO, CA 95814- PHONE: (916) 441-1392 FAX: (916) 446-6003	CARL YANK SUTTER EXTENSION WATER DISTRICT 5499 LINCOLN RD YUBA CITY, CA 95993 PHONE: (916) 673-5658 FAX:
WATER SUPPLY	BEN PENNOCK GLENN-COLUSA IRRIGATION DISTRICT P.O. BOX 150 WILLOWS, CA 95988 PHONE: (916) 934-8881 FAX: (916) 934-3287	DOUG RAYNER LAGUNA IRRIGATION DISTRICT 5065 19-1/2 AVE RIVERDALE, CA 93656 PHONE: (209) 923-4239 FAX: (209) 867-3062
ENVIRONMENTAL	ARTHUR WHIPP ENVIRONMENTAL ALLIANCE 845 WALNUT AVE WALNUT CREEK, CA 94598 PHONE: (510) 932-1433 FAX:	KENNETH GERLACH ENVIRONMENTAL ALLIANCE P.O. BOX 2069 MARTINEZ, CA 94553 PHONE: (510) 229-1060 FAX: (510) 229-3152
PUBLIC HEALTH	PAUL GILBERT-SNYDER DEPARTMENT OF HEALTH SERVICES, DW 2151 BERKELEY WY, RM 113 BERKELEY, CA 94704 PHONE: (510) 540-2192 FAX: (510) 540-2181	NO ALTERNATE PROPOSED
U.S. EPA	SAM ZIEGLER U.S. EPA REGION 9, W-3-1 75 HAWTHORNE ST SAN FRANCISCO, CA 94105 PHONE: (415) 744-1990 FAX: (415) 744-1078	MARIA REA U.S. EPA REGION 9, W-3-1 75 HAWTHORNE ST SAN FRANCISCO, CA 94105 PHONE: (415) 744-2005 FAX: (415) 744-1078
FISH & WILDLIFE	DEBORAH JOHNSTON DEPARTMENT OF FISH AND GAME 20 LOWER RAGSDALE DR, STE 100 MONTEREY, CA 93940 PHONE: (408) 649-7141 FAX: (408) 649-2894	NO ALTERNATE PROPOSED
REGIONAL BOARDS	JEANNE CHILCOTT RWQCB - CENTRAL VALLEY 3443 ROUTIER RD, STE A SACRAMENTO, CA 95827-3098 PHONE: (916) 255-3088 FAX: (916) 255-3015	SUE YEE RWQCB - CENTRAL VALLEY 3443 ROUTIER RD, STE A SACRAMENTO, CA 95827-3098 PHONE: (916) 255-3098 FAX: (916) 255-3015
STATE BOARD	JOHN NORTON SWRCB - NON POINT SOURCE UNIT P.O. BOX 944213, 901 P ST SACRAMENTO, CA 94244-2130 PHONE: (916) 657-0522 FAX: (916) 657-2388	MICHAEL REID SWRCB - BAYS & ESTUARIES UNIT P.O. BOX 944213, 901 P ST SACRAMENTO, CA 94244-2130 PHONE: (916) 657-0691 FAX: (916) 657-2388
FOOD & AG	STEVE SHAFFER DEPARTMENT OF FOOD AND AGRICULTURE, OPCA 1220 N ST, P.O. BOX 942871 SACRAMENTO, CA 94271-0001 PHONE: (916) 654-1765 FAX: (916) 657-5017	
PESTICIDE REGULATION	DAVID DUNCAN DEPARTMENT OF PESTICIDE REGULATION 1020 N ST SACRAMENTO, CA 95814 PHONE: (916) 324-4184 FAX: (916) 324-4088	

[illegible]

****Mike Kiado attended for Paul Gilbert-Snyder**

***Sue Yee replaces Brad Hagemann

*****Mario Menesini replaces Ken Gerlach

Marshall, Lee attended for David Duncan

Watershed Task Force Recommendations

Mission Statement: Provide input to the ISWP and EBEP to insure that they are implemented in a manner that promotes a coordinated and comprehensive watershed management approach to addressing all factors affecting water quality (as per §13241 Porter-Cologne).

Objectives:

- A. Describe watershed management and ensure it is promoted in ISWP and EBEP as an implementation strategy for protecting beneficial uses*¹.
- B. Promote net environmental gain* concept in ISWP and EBEP.
- C. Measure the effectiveness of watershed management approach on water quality on a statewide and on an individual watershed basis.
- D. Consideration of site specific objectives may be a part of watershed management planning process.
- E. Assure commitment by State Board, Regional Boards, USEPA, and other entities*
- F. Ensure adequate and accurate information on which to base decisions.
- G. Promote public awareness, education, and involvement.

Recommendations:

I. Describe watershed management (A)²

A. Provide an overview

1. Description - Watershed management is an integrated holistic approach for restoring and protecting aquatic ecosystems and protecting human health. Watershed management may include diverse issues as defined by the watershed's stakeholders to insure comprehensive solutions. It reflects a growing consensus that many of the existing water quality problems* can best be addressed by a more integrated, basin-wide approach. The purpose of watershed management is variously viewed as 1) a method for returning environmental protection to the local level, 2) an approach to reducing the impact of nonpoint sources, 3) a strategy for integrating management of all components of aquatic ecosystems, and 4) a process for optimizing the cost effectiveness of a blend of point and nonpoint source control efforts. Whichever purpose or blend of purposes predominates, watershed management is not a new centralized program that competes with or replaces existing programs. Rather, it is an approach through which diverse interests - individuals, landowners, farmers, POTWs, environmentalists, and agencies - work together to achieve significant net environmental gain.* Furthermore, watershed management provides a mechanism for considering social and economic interests, in the context of resolving water quality issues.

2. Guiding principles

- a. Net environmental gain* achieved through watershed management does not necessarily provide relief from state or federal law. However, due to the

newness of watershed management, regulatory flexibility* (i.e. changes in regulations and statutes) should be explored as an incentive for the widespread adoption of watershed management. To remove a significant stumbling block to effective partnerships between point and nonpoint sources, compliance with an approved watershed management plan should provide protection equivalent to applicable laws.

- b. Commitment of all stakeholders to adhering to an adopted watershed plan is critical to its success. In particular, mechanisms are needed to ensure that stakeholder regulatory decisions are consistent with adopted watershed plans.
- c. Rather than just another program, watershed management should be viewed as a whole new way of doing business. Over the long range, it should be viewed as a more effective mechanism (where it works) for achieving desired results rather than as another demand on scarce staff resources. Although it may seem more time consuming in the short term, true collaborative partnerships will result in lasting improved effectiveness.
- d. The responsibility for discharge as well as reductions in discharge should be allocated fairly. Interest-based, collaborative problem-solving provides a forum for arriving at equitable solutions.
- e. Protection and enhancement efforts should focus on beneficial uses* as well as numeric water quality objectives.
- f. Stakeholder* involvement - fostering participation of the people most likely to be concerned and most willing to take action - is a key component in successful watershed management.
- g. Watershed management will not always be successful in finding beneficial use protection/enhancement interests that are compatible with economic ones; however, win-win situations are frequent enough that watershed management should be viewed as a significant new option for protecting or enhancing beneficial uses* in a cost-effective manner.
- h. Since watershed management will be broadly beneficial, there should be an equitable sharing of costs among all beneficiaries.
- i. When water quality impairments have been clearly documented and stakeholders* are either unwilling or unable to implement voluntary actions, and the Regional Board has determined that the impairment would be best addressed using a watershed approach, the State and Regional Boards should develop and implement watershed management plans which identify the best options for controlling these impairments.

B. Describe the scope

1. Breadth of concerns - Ensure that water quality objectives, private property interests, beneficial uses*, sustained economic vitality, resource values, social factors, and net environmental gain* can be jointly addressed.
2. Range of stakeholders* - Ensure participation by all interests and the general public, given the purpose of watershed management described above (i.e. the primary focus

should be on net environmental gain* rather than, for example, economic development)

3. Type of water body - Ensure that groundwater, inland surface water, enclosed bays and estuaries, and ocean water can be jointly addressed where appropriate.
- C. Describe the process (A,B,C,E,F,G)²
1. Flow chart the process - See attached flowchart.
 2. Provide a narrative description - The first step in the process combines assessment with categorization of water bodies, establishment of watershed boundaries, identification of sources, and prioritization of watersheds and water bodies. Assessment either recognizes threats to be prevented or describes undesirable conditions to be improved. For problem areas identified in this step, watershed management should be initiated in some prioritized fashion. For areas without problems, a baseline effort to keep these areas free of problems should be applied, given the concurrence of watershed management groups. Ideally, initiation will happen in a grass roots manner, where local stakeholders* are informed of the problem and begin to come together in a collaborative problem-solving fashion. Their role at this stage can be to define the watershed management area, review and summarize data, prepare a state-of-the-watershed report, identify interests, and develop a work plan. If a grass roots effort is slow to develop in high priority watersheds, then the Regional Board should take on a leadership role to encourage the development of one with an eye towards timely implementation. In either case, an important step in the process should be the active identification of potential stakeholders* and an invitation to participate for a specified set of stakeholders*. Active identification should include local research, mail or telephone surveys, interviews, and public notices and the specified set of stakeholders should be those appropriate to any watershed.

The next step is the preparation of a watershed management plan (WMP). This should include a problem description, mission statement, list of objectives, and specific tasks to achieve the objectives and reflect common, compatible, and conflicting interests of the various stakeholders. * Additional monitoring needs may be specified in the plan and the cost and commitments necessary to implement each task should also be included. Tasks should specify who, what, when, and where and reflect a commitment towards accomplishment. Watershed management plans can provide for management of watershed resources beyond water quality, for example, recreational access, bike trails, water supply and flood control. The Regional Board is responsible for approving only those elements which are considered an implementation of the Basin Plans or Statewide Plans. The plan should be made available for public review prior to approval by the Regional Board and other agencies.

Finally, the plan is implemented and eventually the effect of watershed management on beneficial use impacts is evaluated by comparison to the original assessment data. The basis for this comparison should be recent water quality assessment data rather than historical conditions. Resources and technical assistance

necessary to accomplish the specified tasks are obtained and monitoring is performed periodically to demonstrate progress and eventual success. Throughout this process interim actions must be in effect. These actions may take the form of a schedule for WMP development and compliance with objectives when there is early implementation of practicable BMPs. Interim permit limits are to be negotiated between the Regional Board and the discharger rather than by all the stakeholders.*

- D. Illustrate different organizational approaches - The bottom-up or grass roots approach has often consisted of voluntary efforts taken by local watershed stakeholders* to control nonpoint sources and enhance beneficial uses* via collaborative problem-solving. Because participants in these efforts have seen their interests effectively addressed, commitments have remained strong, and lasting, on-the-ground results have been achieved. In contrast, the top-down or regulatory approach consists of command-and-control specification of procedures, products, schedules, participants, etc., etc. If regulators focus too heavily on procedural concerns, local stakeholder interests risk being neither identified nor addressed, commitment may be lacking, and improvements in beneficial uses* may be nonexistent. A straightforward indication of the lack of attention to local stakeholders' * real interests will be the development of watershed management plans that are never implemented. The regulatory approach can be useful in fostering the participation of stakeholders; however, it will usually be of more importance to focus on a grass roots watershed management approach.
 - E. Show how different organizational approaches interact - Typically, the grass roots, voluntary cooperative approach should dominate but the top-down, regulatory approach should be applied in appropriate instances (e.g., to monitor impacts to beneficial uses*, to stimulate development of a grass roots effort when none is forthcoming, and to encourage the participation of stakeholders.)
 - F. Provide assistance for developing watershed management plans - Offer examples and a model plan. The State Board, in collaboration with government and private sector representatives, should develop WMP guidance which provides for a range of goals (e.g., water quality, flood control, water supply, recreation, and development). Some plans will be very flexible, with minimal commitment and requiring no government approval. Others may be very specific, assure commitments, and require approval of Regional Boards and other governmental agencies (such as county government). The guidance should include a process for ensuring policy maker involvement during the planning process.
 - G. Address watershed boundaries and the sequence in which watersheds should be managed - Describe the various approaches to setting watershed boundaries and determining the sequence in which they are managed.
 - H. Ensure scientific quality - Describe quality assurance, scientific advisory groups, scientist-stakeholders*, and other methods for ensuring scientific quality. Distinguish between the QA/QC needs of voluntary collaborative efforts and those of command-and-control, often litigious, efforts.
- II. Provide incentives for the widespread use of watershed management
- A. Increase regulatory flexibility* to achieve net environmental gain* (B,D)²

1. Provide regulatory flexibility* in meeting water quality objectives as long as steps (described in watershed management plan) are taken to achieve net environmental gain* - Allow adequate compliance schedules for point source dischargers when they participate in the implementation of a watershed management plan showing documented progress; investigate ways of modifying or replacing the current method for calculating effluent limits to incorporate a watershed-wide, all-sources-of-input perspective. (For a more thorough discussion of some of the background underlying this recommendation, refer to Section 2 A. of the 8/16/95 memorandum to the task force) Pursue legal research and negotiation with USEPA and other groups to resolve additional issues of regulatory flexibility* for point sources. Regulatory flexibility* for nonpoint sources exists as the Nonpoint Source Management Plan's three-tier approach.
 2. Promote assessment techniques that allocate responsibility and facilitate voluntary and cooperative implementation: the rigorousness of these techniques can range from qualitative to quantitative and is determined by each watershed management group - Emphasize the risk of doing nothing and present examples that range from complex studies or models, detailed allocation schemes, and carefully orchestrated implementation programs to simple analytical efforts, rough estimates of load allocations, and "let's quit studying it and get on with cleanup" control efforts.
 3. Adopt emergency clauses - To provide regulatory flexibility* during emergency situations, clauses exempting agricultural and other dischargers should be included in the event of pest outbreaks and severe weather, "emergencies," however, should be carefully defined (codified or otherwise).
 4. Adopt other incentives - A variety of options may exist here; the ones mentioned by the Task Force were to extend and synchronize the terms of permits, to provide partial relief from permit monitoring requirements, and to pursue USEPA's regulatory reinvention pilot project announcement. The latter may involve modification to existing regulations.
- B. Assure commitment to watershed management by regulatory agencies (B,E,F)²
1. Redirect* resources to watershed management - Identify agencies, personnel, and funds appropriate for redirection (e.g., State/Regional Boards, dischargers, State Revolving Fund, State Clean Water Bond Funds and federal grant funds) and then redirect*.³ Demonstrate commitment at an early stage so that local interests are motivated to participate. Provide resources in proportion to initial threats to beneficial uses*.
 2. Encourage stakeholders* to seek additional funding - Emphasize the opportunity that all stakeholders* have in securing funds for watershed management and encourage them to pursue these opportunities.³
 3. Conduct annual review of watershed management progress - List indicators that will be used to measure progress in implementing this approach on an annual basis.
 4. Conduct evaluation of the effect of the watershed management approach on net environmental gain* - Describe a study design, success criteria, monitoring

procedures, sampling sites, and an appropriate schedule for evaluating the success of this new approach.

- C. Provide other support services (E, F)
 - 1. Provide public education and technical assistance - Implement a program that combines public outreach, publicity campaigns, training, volunteer monitoring*, a clearinghouse, and a guidance manual.³
 - 2. Promote inter-agency and intra-agency coordination - Foster teamwork to provide technical assistance, coordinate inspections, etc.³
 - 3. Encourage legislative support - In collaboration with public and private interests develop watershed management legislation which provides not only for recognition of this approach but establishes a forum to coordinate a widely defined set of interests (e.g., water quality, flood control, water rights, Good Samaritan law, etc.).³
- III. Describe the relationship of watershed management to various programs which include but are not limited to: (A)²
 - A. Nonpoint Source Management Plan - Incorporate the NPSMP's three-tiered approach (without modification) into the ISWP and EBEP and explain that watershed management can be an example of the tier one voluntary approach. Explain the role of watershed management in tiers two and three as well (e.g., watershed management may be an example of the tier two approach when it is performed pursuant to potential traditional regulatory actions arising from documented impairments).
 - B. Management Agency Agreements and Memoranda of Understanding - Describe in MAAs and MOUs that each signatory agency is to participate as a stakeholder* in any watershed management effort that addresses that agency's legal mandates. For watershed management to be most effective, MAAs and MOUs should complement WMPs.
 - C. Water quality assessment and monitoring generally - Redirect* resources to these efforts both to identify areas in need of watershed management and to evaluate the success of watershed management.
 - D. Land use general plans - Examine the potential for linking general plans and watershed management plans for advancing the protection of beneficial uses*.
 - E. Section 401 certification - Add wetlands and riparian protection as another interest for watershed management.
 - F. Antidegradation - Add antidegradation as an interest for watershed management and explore its role in describing baseline conditions for unimpacted watersheds. The State Board should develop guidance for implementation of the statewide antidegradation policy; moreover, watershed management groups should consider it in relation to water reclamation, the permanence of discharge below water quality objectives, promoting historically poor water quality, beneficial use protection vs achievement of water quality objectives, and economic considerations.
 - G. Option 9 - The President's Forest Plan - Emphasize the inclusion of beneficial uses* that address this interest in watershed management.
 - H. Basin Plans - Describe the relationship of WMPs to Basin Plans once it has been determined by the Watershed Management Initiative.

- I. Total Maximum Daily Load (TMDL) - TMDL is a formal process under the Federal Clean Water Act that leads to the assignment of load allocations and waste load allocations to dischargers. A broader, more flexible, framework of "allocation of responsibility* for pollutant discharge" that can apply to all sources in a watershed should be supported. This process becomes a useful option to conduct watershed management. Voluntary, collaborative problem solving is characteristic of both nonpoint source allocation of responsibility* and watershed management. The allocation of responsibility process may be a voluntary (tier 1) approach with flexible responsibilities agreed upon by the local watershed stakeholders. The process may also be a directed approach under the prospect of regulatory action (regulatory-based encouragement - tier 2), or if required, result in formal load allocations or waste load allocations (tier 3). The ISWP and EBEP should clarify this distinction and describe the relationship of both the TMDL process and the allocation of responsibility* process to watershed management plans.
 - J. Site-specific objectives - Explain that watershed management and the development of site-specific objectives are distinct exercises and that they may occur independently so that neither one impedes progress on the other or they may occur in conjunction with each other. Describe the relationship between a WMP and a site-specific objective when both are developed.
 - K. Proposition 65³ - Emphasize the inclusion of beneficial uses* that address this interest in watershed management.
 - L. Endangered Species Acts³ - Emphasize the inclusion of beneficial uses* that address this interest in watershed management.
 - M. Bay Protection and Toxic Cleanup Program - Make BPTCP data widely available and user-friendly to enhance water quality assessment and adopt watershed management as a BPTCP option for identifying, remediating, and preventing Toxic Hot Spots.
 - N. Sanitary Surveys - Encourage widespread availability of sanitary survey data to enhance water quality assessment and include domestic water supply agencies as watershed management stakeholders.*
 - O. Section 404 - Add Discharge into the Waters of the United States as another interest for watershed management.
 - P. Section 1600 - Add Fish and Game Code Streambed Alteration Agreements as another interest for watershed management.
- IV. Initiate specific efforts (E)²
- A. Maintain involvement of the Watershed Task Force as the FED and plans are developed - Discourage development of an FED draft by State Board staff working in isolation who end up with excessive ownership of the language. Rather than scheduling meetings in accordance with completion of portions of the draft language, pursue other options to maximize ownership by the full range of stakeholders* presently represented. Acknowledge, however, that ultimate responsibility for the plans and the FED remains with the State Board.
 - B. Link milestones for implementing watershed management to regulatory actions so that they take effect if the milestones are not met on time.

C. Provide seed money

V. Definitions (G)²

- A. Net environmental gain (NEG) - This should focus on beneficial uses* and the physical and biological, as well as chemical, integrity of the State's waters. Various NEG options should be compared (e.g., water quality objectives, habitat enhancement, and resource extraction*) with eventual selection determined by maximum benefit compatible with watershed community needs. Because the stakeholders* in each watershed are the best judges of what constitutes NEG, watershed management groups must retain a leading role in defining it. For the purposes of this definition "benefit" and "gain" can be used interchangeably and both have the same meaning as "enhancement."
- B. Other entities - This means all regulatory and resource agencies with authority in the watershed as well as private organizations and individuals.
- C. Regulatory flexibility - Regulatory flexibility should result in net environmental gain* and will be allowed in the context of an effective watershed management effort which documents net environmental gain*. Specific requirements or regulations which may be modified include compliance schedules, effluent limit calculations, TMDLs, antidegradation, mixing zones, background levels, and others.
- D. Redirect - To move resources (staff, funds, etc.) from one program or activity to another.
- E. Volunteer Monitoring - A way for stakeholders* to assess conditions and to track the success of watershed management and to judge whether their interests have been truly addressed. If they have been, the stakeholders* will be committed* to the watershed and to tracking its health. Combining this commitment with proper training and technical support will produce data of high quality. A lack of attention to stakeholders'* fundamental interests and a consequent lack of commitment will not.
- F. Allocation of responsibility process - The allocation of responsibility process is a method of providing a flexible assessment and planning framework for identifying actions needed to protect and enhance beneficial uses*. As part of the process, contributing sources are identified, control efforts are assigned, and an implementation plan is developed. As described previously in Section III. I., this can be implemented as a three-tiered approach that first relies on voluntary collaboration and cooperation (tier 1), if necessary, moving to regulatory-based encouragement (tier 2), and finally, if necessary, moving to a formal assignment of load allocations and waste load allocations under a TMDL assessment (tier 3).
- G. Stakeholders - These are representatives of the watershed community, including those who live and work there, those who derive economic benefit from, protect resources, or recreate within the watershed. Landowners, land managers, environmental groups, educational institutions, drinking water utilities and local, state, and federal government agencies are to be included.
- H. Resource extraction - This means the removal of physical or biological resources (e.g., fish, wildlife, in stream gravel, the water itself) from an aquatic ecosystem.

Watershed management may include resource extraction in its determination of net environmental gain*

1. Water quality problems - Watershed management groups have included, but are not limited to, the following water quality problems:

- Habitat loss (salt marsh, mud flats, riparian, migratory and resident fish, spawning areas, (etc.))
- Endangered species loss
- Stream stabilization
- Biological diversity
- Soil erosion
- Water management and diversions
- Grazing
- Flooding and flood management
- Pesticide and fertilizer application
- Agricultural productivity
- Residential and commercial development
- Septic systems
- Filling of wetlands
- Urban runoff
- Removal of vegetation
- Streamside buffer strips
- Reforestation and revegetation
- Road construction
- Conjunctive use of ground and surface water
- Reuse of treated wastewater
- Loss of sustained low-flow regime in streams
- Altered peak flows
- Loss of infiltration capacity
- Logging
- Algal growth
- K-12 curriculum development
- Water temperature
- Bacteriological contamination
- Chemical contamination
- Impediments to fish passage
- Dumping (toxics, exotic plant seeds, DO-lowering green waste, etc.)
- Homeless encampments
- Horse manure
- Inadequate creekbank setbacks
- Educational kiosk
- Hike/bike/equestrian trails

J. Beneficial uses -

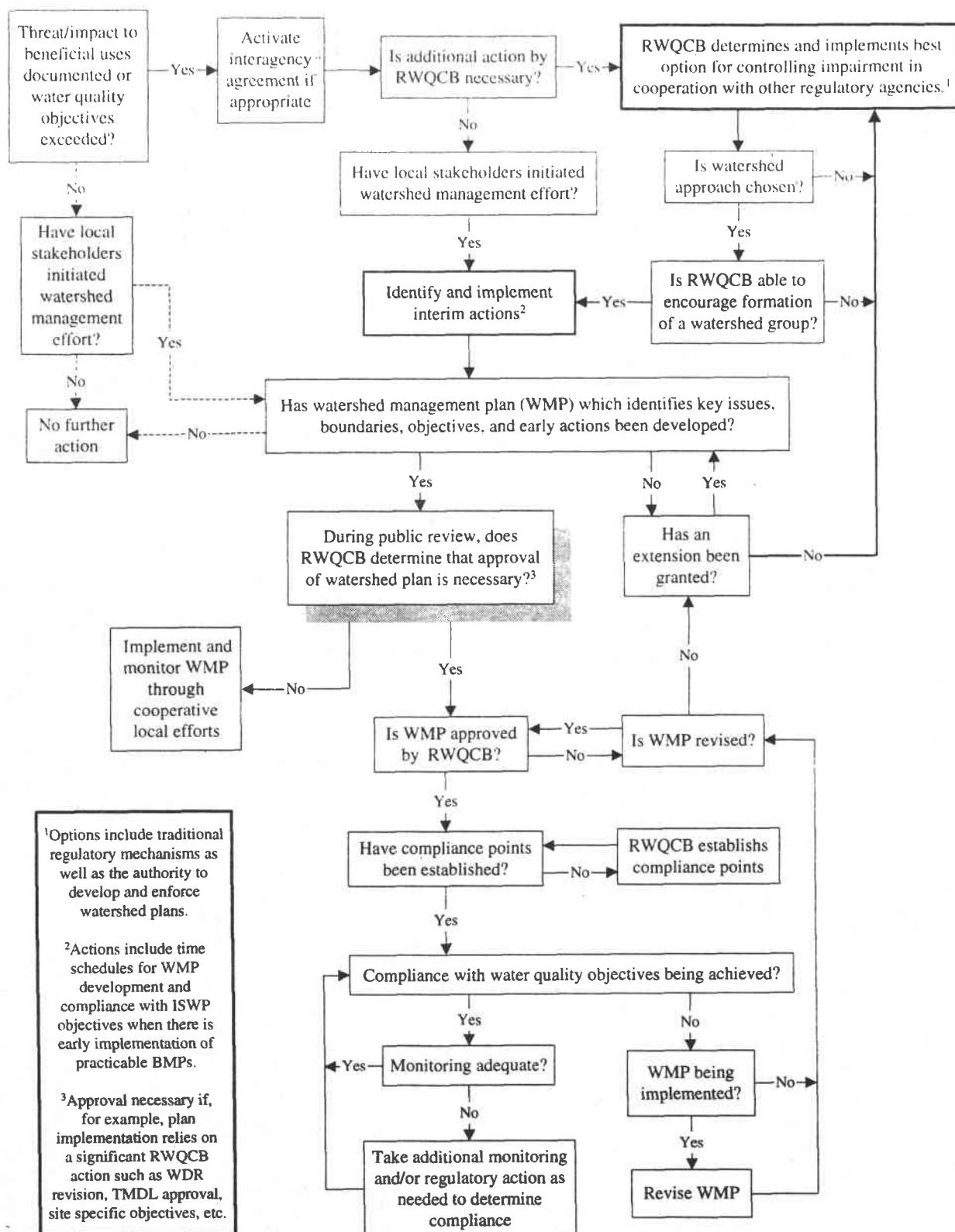
1. Municipal and Domestic Supply - Includes usual uses in community or military water systems and domestic uses from individual water supply systems.
2. Agricultural Supply - Includes crop, orchard, and pasture irrigation, stock watering, support of vegetation for range grazing and all uses in support of farming and ranching operations.
3. Industrial Service Supply - Includes uses which do not depend primarily on water quality such as mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.
4. Industrial Process Supply - Includes process water supply and all uses related to the manufacturing of products.
5. Groundwater recharge - Natural or artificial recharge for future extraction for beneficial uses and to maintain salt balance or halt saltwater intrusion into freshwater aquifers.
6. Freshwater Replenishment - Provides a source of freshwater for replenishment of inland lakes and streams of varying salinities.
7. Navigation - Includes commercial and naval shipping.
8. Hydropower Generation - Used for hydropower generation.
9. Water Contact Recreation - Includes all recreational uses involving actual body contact with water, such as swimming, wading, waterskiing, skin diving, surfing, sport fishing, uses in therapeutic spas, other uses where ingestion of water is possible.
10. Non-Contact Water Recreation - Recreation uses which involve the presence of water but do not require contact with water, such as picnicking, sunbathing, hiking, beachcombing, camping, pleasure boating, tidepool and marine life study, hunting, and aesthetic enjoyment in conjunction with the above activities as well as sightseeing.
11. Ocean Commercial and Sport Fishing - The commercial collection of various types of fish and shellfish, including those taken for bait purposes, and sport fishing in oceans, bays, estuaries, and similar no-freshwater areas.
12. Warm Freshwater Habitat - Provides a warm-water habitat to sustain aquatic resources associated with a warmwater environment.
13. Cold Freshwater Habitat - Provides a cold-water habitat to sustain aquatic resources associated with a coldwater environment.
14. Preservation of Areas of Special Biological Significance - Includes marine life refuges, ecological reserves, and designated areas of special biological significance, such as areas where kelp propagation and maintenance is a feature of the marine environment requiring special protection.
15. Saline Water Habitat - Provides an inland saline water habitat for aquatic and wildlife resources.
16. Wildlife Habitat - Provides a water supply and vegetative habitat for the maintenance of wildlife.
17. Preservation of Rare and Endangered Species - Provides an aquatic habitat necessary, at least in part, for the survival of certain species established as being rare and endangered species.

18. Marine Habitat - Provides for the preservation of the marine ecosystem including the propagation and sustenance of fish, shellfish, marine mammals, waterfowl, and vegetation such as kelp.
19. Fish Migration - Provides a migration route and temporary aquatic environment for anadromous or other fish species.
20. Fish Spawning - Provides a high quality aquatic habitat especially suitable for fish spawning.
21. Shellfish Harvesting - The collection of shellfish such as clams, oysters, abalone, shrimp, crab, and lobster for either commercial or sport purposes.
22. Aquaculture - Provides water supply for fish hatcheries and aquaculture operations.
23. Estuarine Habitat - Provides an essential and unique habitat that serves to acclimate anadromous fishes (salmon, striped bass) migrating into fresh or marine water conditions. This habitat also provides for the propagation and sustenance of a variety of fish and shellfish, numerous waterfowl and shore birds, and marine mammals. (San Francisco Bay Regional Plan)
24. Mariculture - The culture of plants and animals in marine waters independent of any pollution source. (Ocean Plan)

-
1. Terms followed by an asterisk (*) are defined in Section V.
 2. These capital letters illustrate linkages to the seven objectives identified by the Task Force.
 3. These issues address the Watershed Management Initiative.

Watershed Management Approach for Net Environmental Benefit

The following outlines an approach to watershed management which promotes local stewardship and allows for regulatory flexibility



Executive Summary

Watershed Task Force Recommendations

The Watershed Task Force developed the following mission statement and set of objectives:

Mission Statement: Provide input to the ISWP and EBEP to insure that they are implemented in a manner that promotes a coordinated and comprehensive watershed management approach to addressing all factors affecting water quality (as per §13241 Porter-Cologne).

Objectives:

- A. Describe watershed management and ensure it is promoted in ISWP and EBEP as an implementation strategy for protecting beneficial uses.
- B. Promote net environmental gain concept in ISWP and EBEP.
- C. Measure the effectiveness of watershed management approach on water quality on a statewide and on an individual watershed basis.
- D. Consideration of site specific objectives may be a part of watershed management planning process.
- E. Assure commitment by State Board, Regional Boards, USEPA, and other entities.
- F. Ensure adequate and accurate information on which to base decisions.
- G. Promote public awareness, education, and involvement.

The recommendations that evolved from the objectives emphasized that the plans should describe watershed management, provide incentives for its widespread use, and describe its relationship to other programs. Recommendations regarding immediate steps that might be taken to encourage its development were also included.

In order for the plans to describe watershed management, the Task Force has recommended a succinct description of watershed management, a set of guiding principles, and a description of watershed management's scope and process. The brief description highlights the breadth and purposes of watershed management and reads as follows:

Watershed management is an integrated holistic approach for restoring and protecting aquatic ecosystems and protecting human health. Watershed management may include diverse issues as defined by the watershed's stakeholders to insure comprehensive solutions. It reflects a growing consensus that many of the existing water quality problems can best be addressed by a more integrated, basin-wide approach. The purpose of watershed management is variously viewed as 1) a method for returning environmental protection to the local level, 2) an approach to reducing the impact of nonpoint sources, 3) a strategy for integrating management of all components of aquatic ecosystems, and 4) a process for optimizing the cost effectiveness of a blend of point and nonpoint source control efforts. Whichever purpose or blend of purposes predominates, watershed management is not a new centralized program that competes with or replaces existing programs. Rather, it is an approach through which diverse interests - individuals,

landowners, farmers, POTWs, environmentalists, and agencies - work together to achieve significant net environmental gain. Furthermore, watershed management provides a mechanism for considering social and economic interests, in the context of resolving water quality issues.

This succinct description is accompanied by a set of guiding principles that address watershed management's compatibility with existing law, the need for commitment at all levels to this new approach, and a shift from a more narrow focus on water quality objectives to a wider concern for protection of beneficial uses. Other recommended principles include the necessity of stakeholder involvement, the need to protect the economy as well as the environment of watersheds, the appropriateness of cost sharing among all beneficiaries, and the role of State and Regional Water Boards. In addition to these guiding principals, recommendations are provided for the scope of watershed management. Both economic and environmental concerns should be addressed, a broad range of stakeholders should participate, and there should be no barriers to the joint protection of all types of water bodies.

In regards to the process of watershed management, recommendations were developed in the form of a narrative description and flow chart. Both items presented details of the planning and assessment stage, the preparation and implementation of watershed management plans, and the determination of progress and eventual success. Features of the process that were emphasized include the active rather than passive identification of stakeholders, the need for prioritization of watersheds, the back up role of Regional Boards if stakeholders fail to organize, and the identification of common, compatible, and conflicting interests among stakeholders. The need for and details of interim actions that are to be in effect throughout the process were also presented. Other recommendations included in the description of watershed management emphasize the preference for a grass-roots, collaborative problem-solving approach as opposed to a command-and-control organizational approach and argue for providing guidance in plan development, quality assurance, and other areas. The guidance should include a process for ensuring policy maker involvement during the planning process.

Recommended incentives to promote the widespread use of watershed management include increased regulatory flexibility, a focus on net environmental gain, the use of a wide range of methods to allocate responsibility, and the adoption of emergency clauses. Although some ideas emerged for enhancing regulatory flexibility, the Task Force recommended the pursuit of additional legal research and negotiation with USEPA and other groups to identify specific options. The Task Force further recommended that the State and Regional Water Boards assure their commitment to watershed management and that they do so early in the process to encourage stakeholder participation. Commitment should be expressed, in part, through the Watershed Management Initiative and include the redirection of resources to watershed management, the acquisition of new funding, and the conduct of annual and longer-term reviews to assess the progress and accomplishments of watershed management. Recommended support services include public education, technical assistance, inter- and intra-agency coordination, and legislative support.

Finally, recommendations are provided for describing the relationship of watershed management

to other programs. The Task Force urged the incorporation of the Nonpoint Source Management Plan's three-tier approach into the plans, accompanied by an explanation of the role of watershed management in each tier. Another recommendation urged that each signatory agency of an MAA or MOU participate as a stakeholder in watershed management groups and that these interagency agreements complement watershed management plans. In conclusion, the Task Force recommended that the experiences to date of watershed management groups be used to help guide expansion of this new approach and that steps be taken now to implement watershed management rather than waiting for completion of the plans.